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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

KUMAR

Serial No. Unknown

Filed: May 11, 2001

For: SCANNING OF ELECTROMAGNETIC BEAMS

Atty. Ref.: 540-311

Group:

Examiner:

\* \* \* \* \*

May 11, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

In order to place the above-identified application in better condition for examination,  
please amend the application as follows:

**IN THE CLAIMS**

Please cancel claims 24, 26 and 28 without prejudice or disclaimer.

Please substitute the following amended claims for corresponding claims previously  
presented. A copy of the amended claims showing current revisions is attached.

3. (Amended) A device according to claim 1, wherein the steering means (28, 30, 32, 34)  
comprises magnetic means.
6. (Amended) A device according to claim 4, wherein the gradient of magnetisation rotates  
about the central axis (24).
7. (Amended) A device according to claim 1, wherein the offset between the beam (12) and the  
central axis (24) is angular.

8. (Amended) A device according to claim 1, wherein the offset between the beam (12) and the central axis (24) is spatial.

9. (Amended) A device according to claim 1, wherein the steering means (72, 72a, 72b, 73) comprises a ferrite material (73) arranged within a solenoid (72, 72a, 72b) so as to rotate a linearly polarised beam (70) about the axis (78).

13. (Amended) A device according to claim 1, further comprising a reflective surface (64, 81) located adjacent a face of the body (14; 71) from which the beam (12; 70) emerges.

15. (Amended) A device according to claim 1, wherein the beam (12; 70) is swept through 360° in a plane which is perpendicular to the central axis (24; 78).

16. (Amended) A device according to claim 1, wherein the beam (12; 70) comprises microwave radiation.

20. (Amended) A communications unit (60) incorporating a device according to claim 1, and which includes radiation receiving means, modulation and demodulation means for modulating and demodulating information onto and from the radiation beam (12; 70).

22. (Amended) A device, as in claim 1, characterised in that the beam of radiation is at Ka band (26.5 to 40GHz).

23. (Amended) A device, as in claim 1, characterised in that the beam of radiation is at W-band (75 to 110GHz).

25. (Amended) A communications unit incorporating a device as in claim 1 including, radiation receiving means and modulation and demodulation means for modulating and demodulating information onto and from radiation.

27. (Amended) A communications system comprising a plurality of units as in claim 25.